

REMARKS

The present invention shows two different types of embodiments, i.e., the smooth-walled bag of embodiments 2 and 3 and the bellows of embodiments 4A, 4B and 7. MPEP §2173.05(i), entitled "Negative Limitations", states: "If alternative elements are positively recited in the specification they may be explicitly excluded in the claims." Thus, all pending claims are now limited to exclude bellows embodiments as exemplified by Figs. 4A, 4B and 7.

Claim 7 is hereby amended to correct an inadvertent typographical error and to be consistent with the teaching at page 6.

In preparing this response, the undersigned came to the realization that the examiner's office action does not present a rejection of claims 7 or 8. In view of the fact that the office action Summary does not indicate allowability of claims 7 and 8, their status remains unknown. Further, because the office action does not treat all pending claims, it is considered to be improperly final and it is respectfully requested that the finality of the outstanding office action be withdrawn.

Claims 1-5, 9 and 12

The rejection of claims 1-5, 9 and 12 over Drumm in view of Weber is respectfully traversed for the reason that neither Drumm nor Weber suggests anything by way of a bladder which is not a bellows. The present invention, insofar as the undersigned is aware, represents the first accumulator to have a non-bellows, gas-impermeable, non-elastic bladder. Suffice it say here, neither Drumm nor Weber is suggestive of such a

structure.

Claims 14, 16, 18 and 19

The rejection of claims 14, 16, 18 and 19 is respectfully traversed for the foregoing reasons and for the reasons that the vent of Miller would serve no useful purpose in the accumulator of Drumm. The Drumm device is designed to "fulfill [sic.] the function of a hydraulic piston," quoting from column 2, line 67 to column 3, line 1, with ring 18 around the bellows forming a seal with the wall of the housing 1. The ring 18 would thus retain gas below the bellows end plate and thereby prevent gas from accumulating at the top of the tank. Thus, the vent of Miller which relies upon gas accumulating at the top of tank would not be effective in venting gas if placed in the Drumm device.

Claims 7, 8 and 20

As noted above, NO rejection of claim 7 or of claim 8 appears in the most recent office action.

As also noted above, claim 7 has been amended to cure an inadvertent typographical error.

Regarding claims 7 and 20, as noted in paragraphs [0018] and [0035] where the bladder is in the form of a bellows, the wall must have a thickness of 0.002-0.01 inches. As further taught in paragraph [0018] such a thick wall is required to sustain the inwardly radial forces on the bellows. In other words, if the walls are too thin, the bellows will not be able to retain its structure. In contradistinction, the bladder in the

form of a bag without the accordion structure (“bellows” or “pleats”), the wall thickness can be somewhat thinner as defined by claim 7, i.e., 0.0003 to 0.0007 inches thick. Accordingly, because the references disclose and suggest only bellows structures, they cannot be suggestive of such a thin-walled bladder.

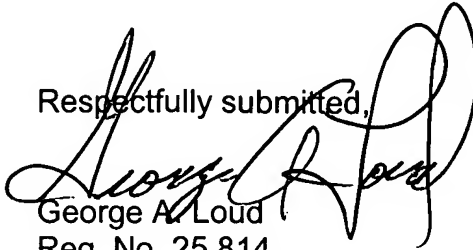
Claim 11

Claim 11 has been amended to functionally define the coil spring as described in paragraphs [0022], [0030] and [0031] and is shown in Fig. 3. Note that paragraph [0031] describes the guard spring 38 as having the same functions as the internal spring of Fig. 2, which functions are described in paragraph [0030]. Further, note that claim 1 defines the contact between the valve and the bellows as occurring at a “predetermined low volume of the working fluid.”

The rejection of claim 11 is traversed for the foregoing reasons and, additionally, for the reasons which follow. It is not clear what spring the examiner is referring to in the structure of Legrand. Note that Legrand shows a number of valves, including safety valve 42 which is urged toward an open position by a spring 38b and a lower valve 37 located in the interior of the bellows which is urged closed by a spring without a reference numeral, referred to at column 4, lines 55 and 56. Neither of these springs would come into contact with the bladder and neither is capable of performing the functions recited by amended claim 11. Accordingly, even if Drumm were to be modified by incorporation of features of Legrand, the result would not be anything resembling the structure defined by claim 11 here.

The Weber patent is relied upon by the examiner solely for its disclosure of two ports and valves and discloses nothing relevant to the coil spring structure additionally recited by claim 11.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "George A. Loud", is written over the typed name and registration number.

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